FIG.1

FIG.2

YEp 13 plasmid map (10786 bp)

EcoRI, 1
ClaI, 26
HindIII, 32
BamHI, 378
SphI, 565
SalI, 654
ori
PstI, 3612
bla
EcoRI, 4364
StuI, 4445
PstI, 4609
BglII, 4812
BglII, 5015
tet
LEU2
5415, XhoI
5655, HpaI
6059, BstEII
6176, ClaI
6272, KpnI
6662, EcoRI
7586, SalI
8131, BglII
8392, SacI
8792, PstI
9104, HpaI
REP3
ARS-2μm
10085, XbaI
10484, BclI
10683, HindIII

SalI+XhoI;
Elution of LEU2 fragment

pUC19 (2686 bp)

lacZ
ORI
Ap^r

BsmBI 51
DrdI 91
NdeI 183
NarI/KasI 235
BglI 245
FspI 256
PvuI 276
PvuII 306
POLYLINKER
CLONING SITES
396-454
PvuII 628
TfiI 641
SapI 683
TfiI 781
AflIII 806
DrdI 908
AluNI 1217
Eco57 I 1333
AhdI 1694
BsrDI 1753
BsaI 1766
BsrFI 1779
Bpml 1784
BglI 1813
AvaII 1837
FspI 1919
BsrDI 1935
AvaII 2059
PvuI 2066
ImnI 2294
SspI 12381
AatII 2617
Eco0109 I 2674
BsmBI 2683
Eco57 I 12381
Scal 2177
Bcgl 2215
BsmBI 51

SalI

prom.lacZ

H Sp P
(Hc)Sl Xb B Sm K Sc RI
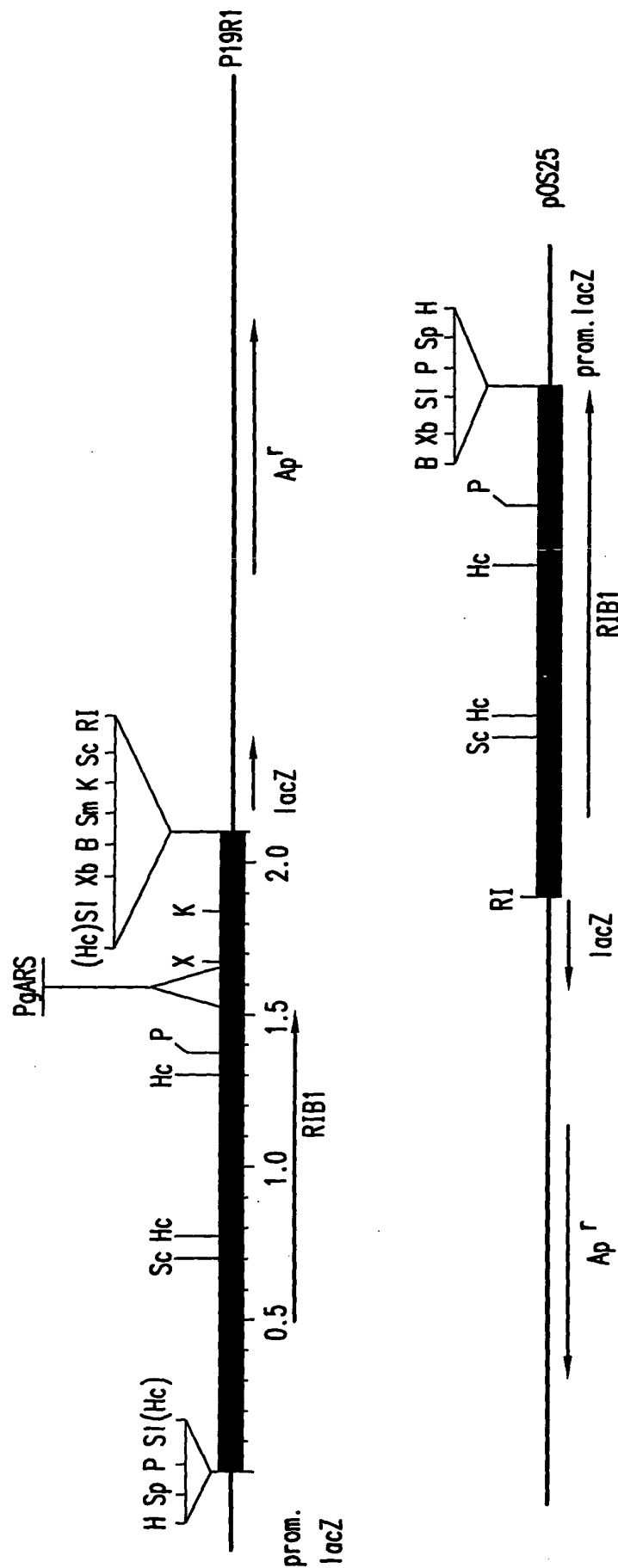K   RI
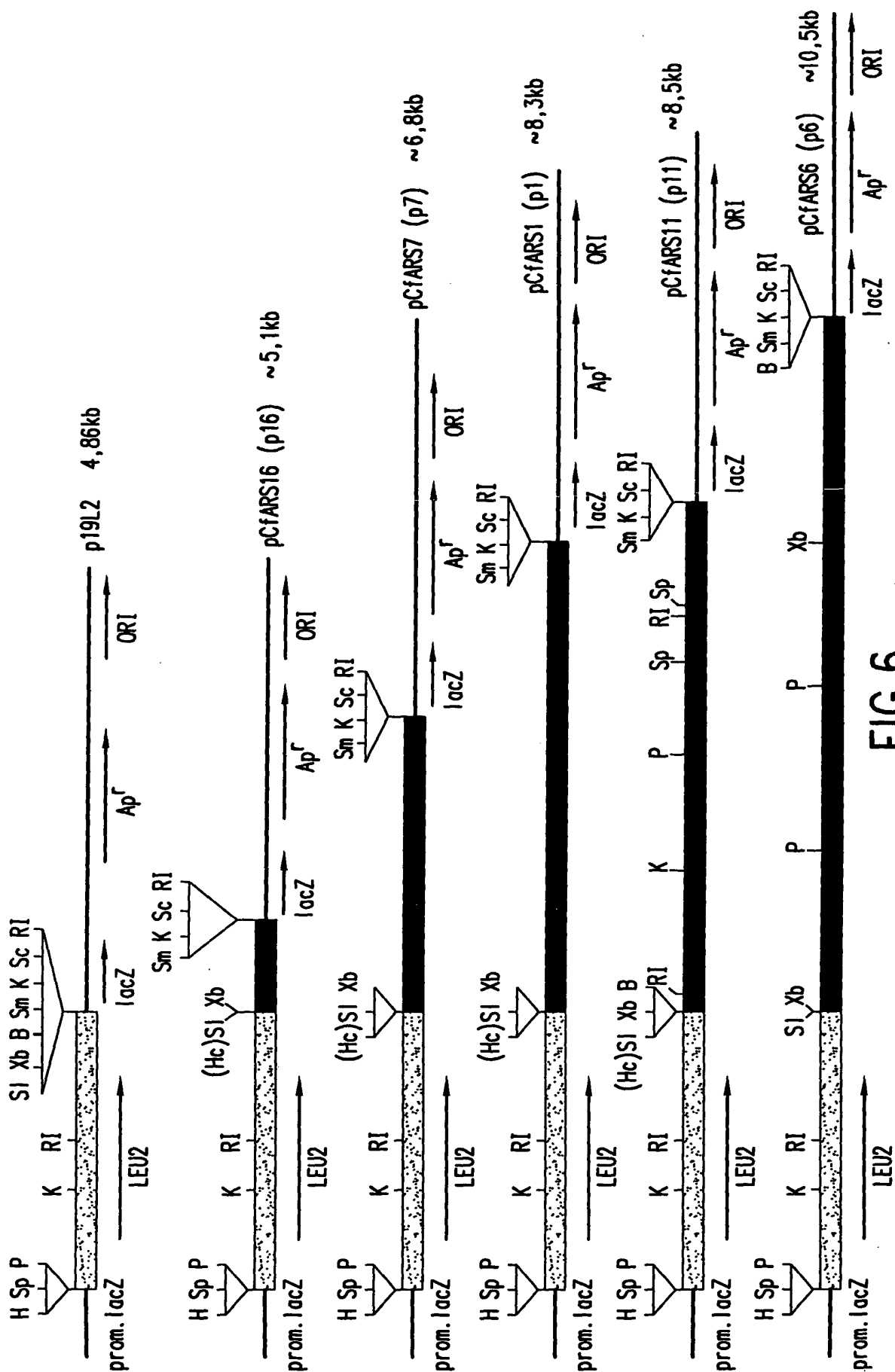LEU2
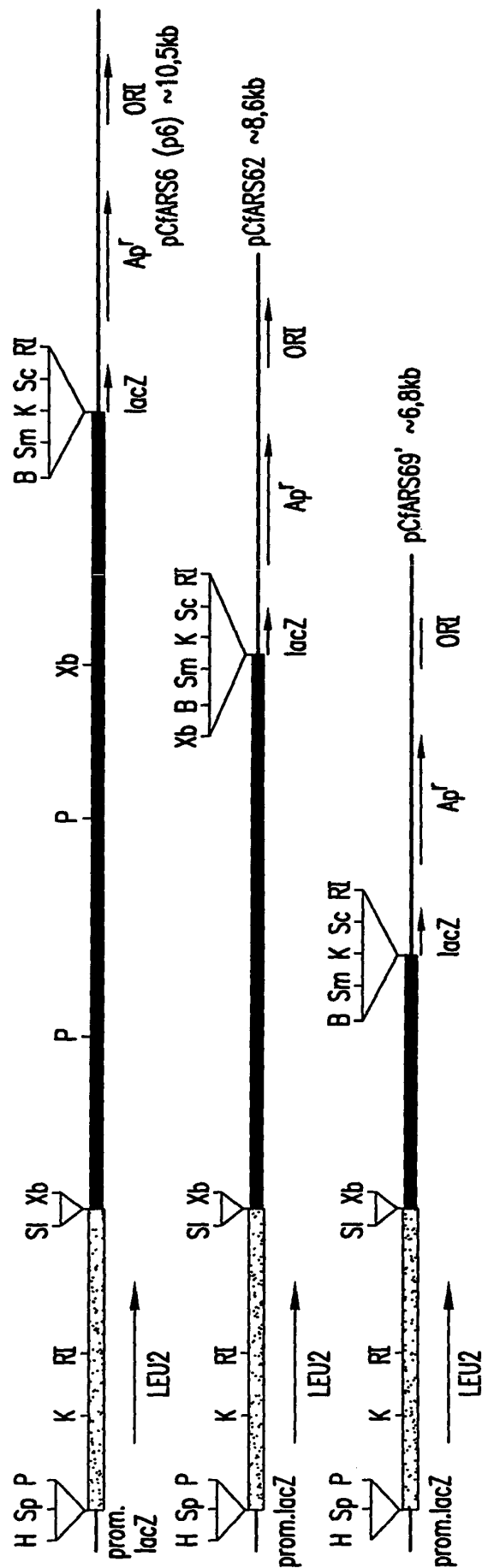K   RI   lacZ

ORI   Ap^r   ORI

p19L2

FIG.3

FIG.4

FIG.5
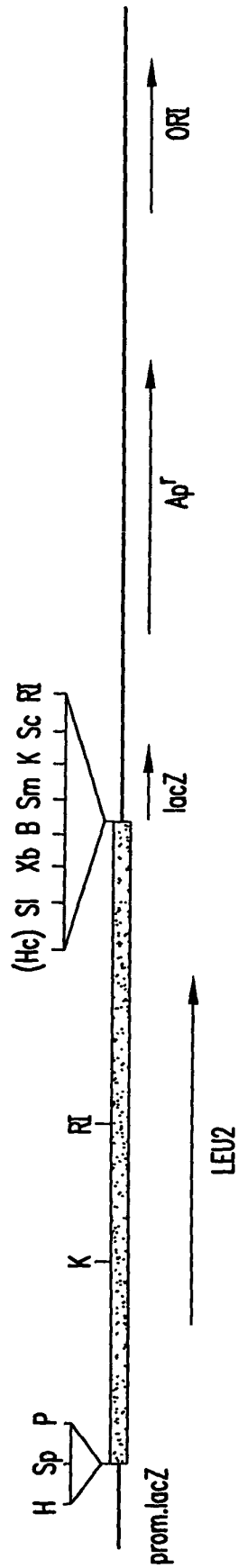
FIG.6

ppl. No. 09/903,508; Group Art Unit: To Be Assigned
kt. No. 1533.0830003; Batch No.: To Be Assigned
ventor(s): Abbas et al.; Tel: 202/371-2600
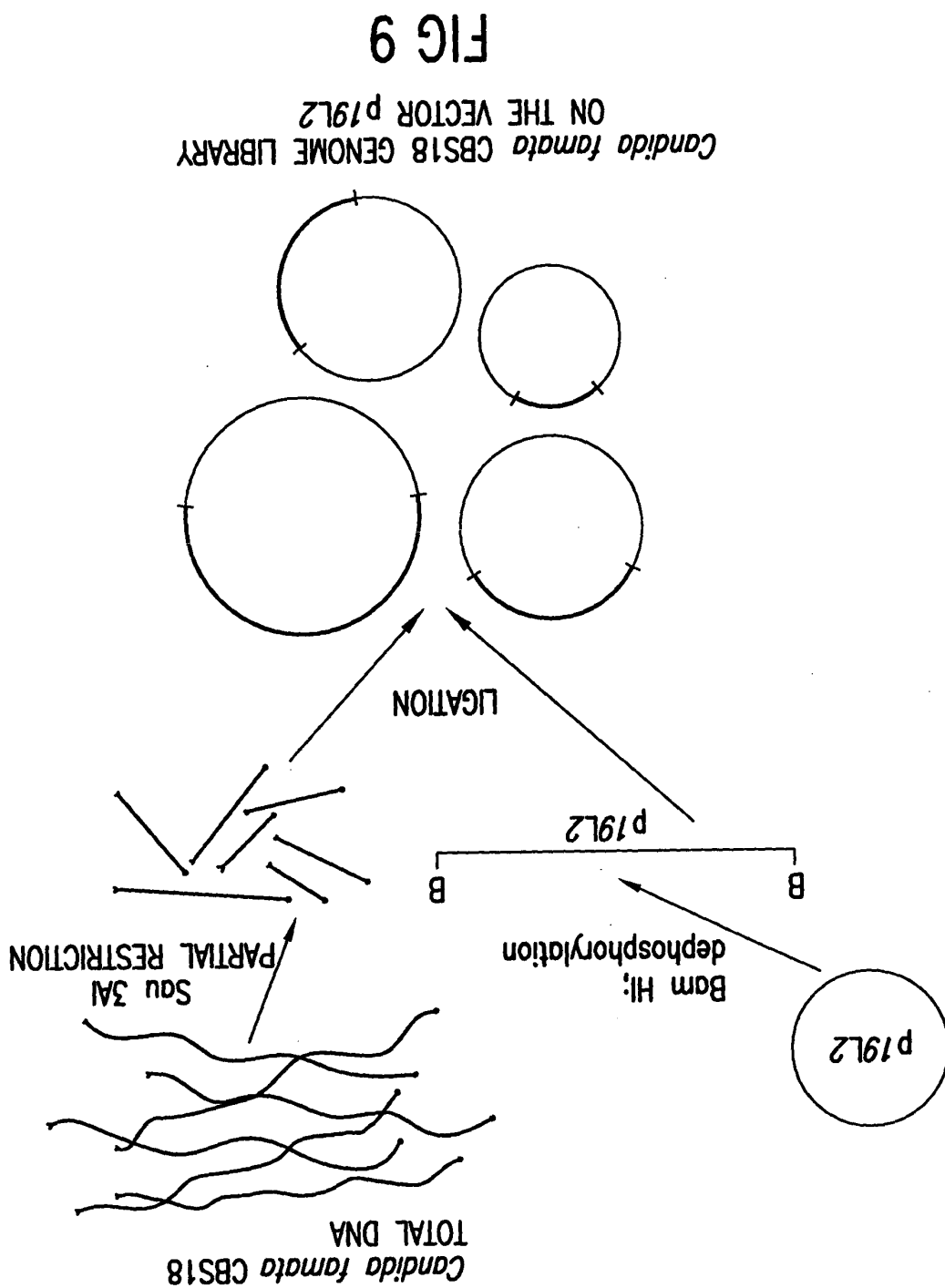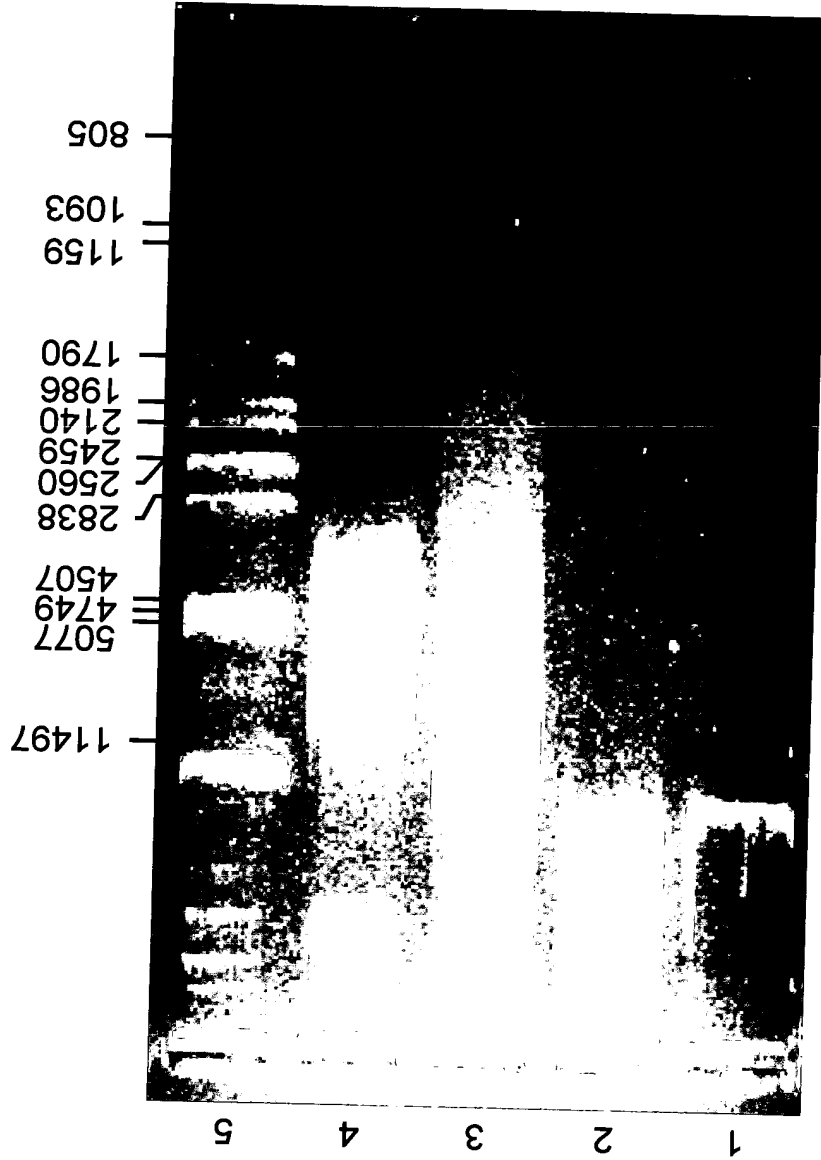itle: Transformation Systems for Flavinogenic Yeast

FIG.7

FIG.8

FIG 9

Candida famata CBS18 GENOME LIBRARY ON THE VECTOR p19L2
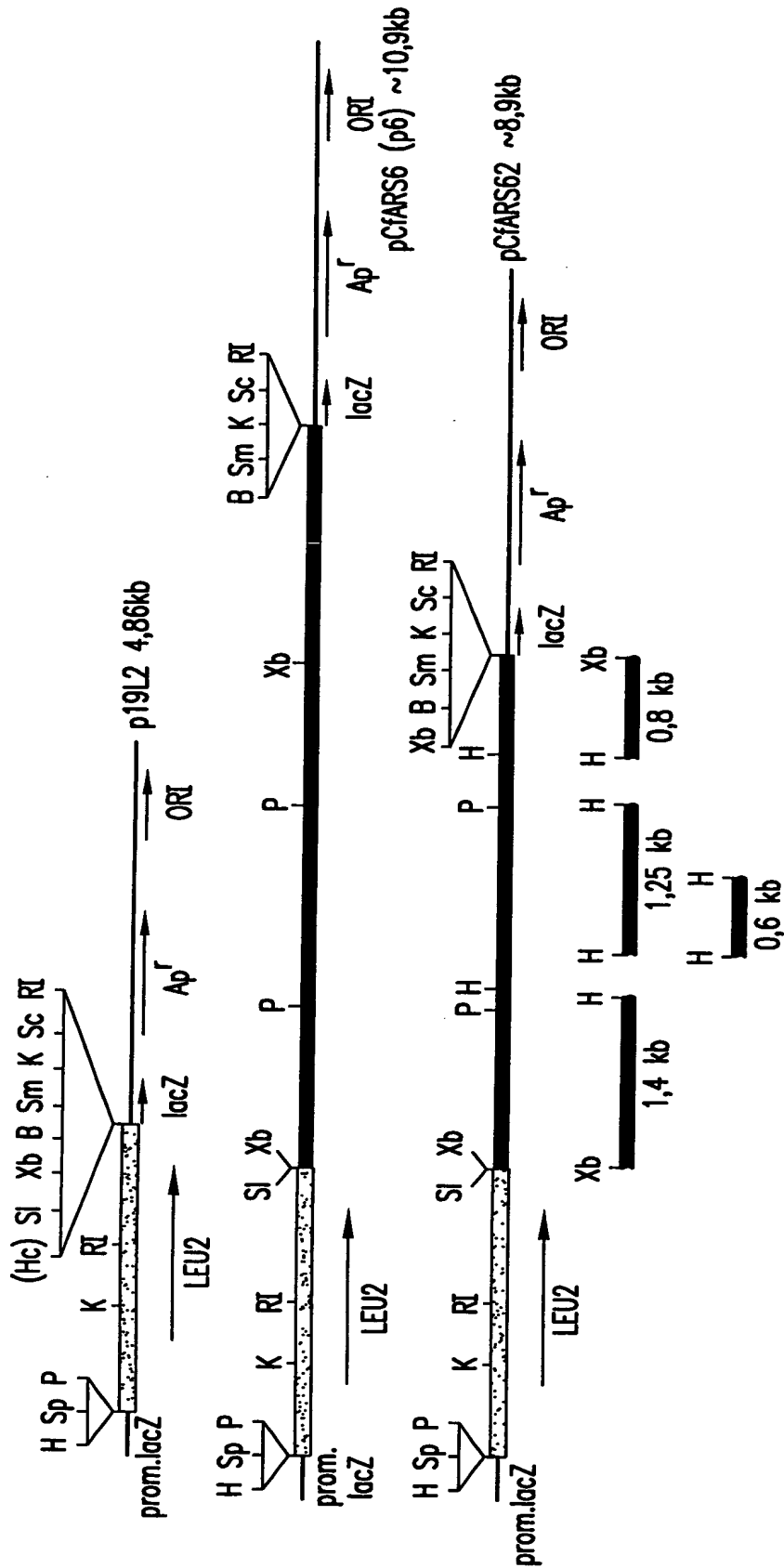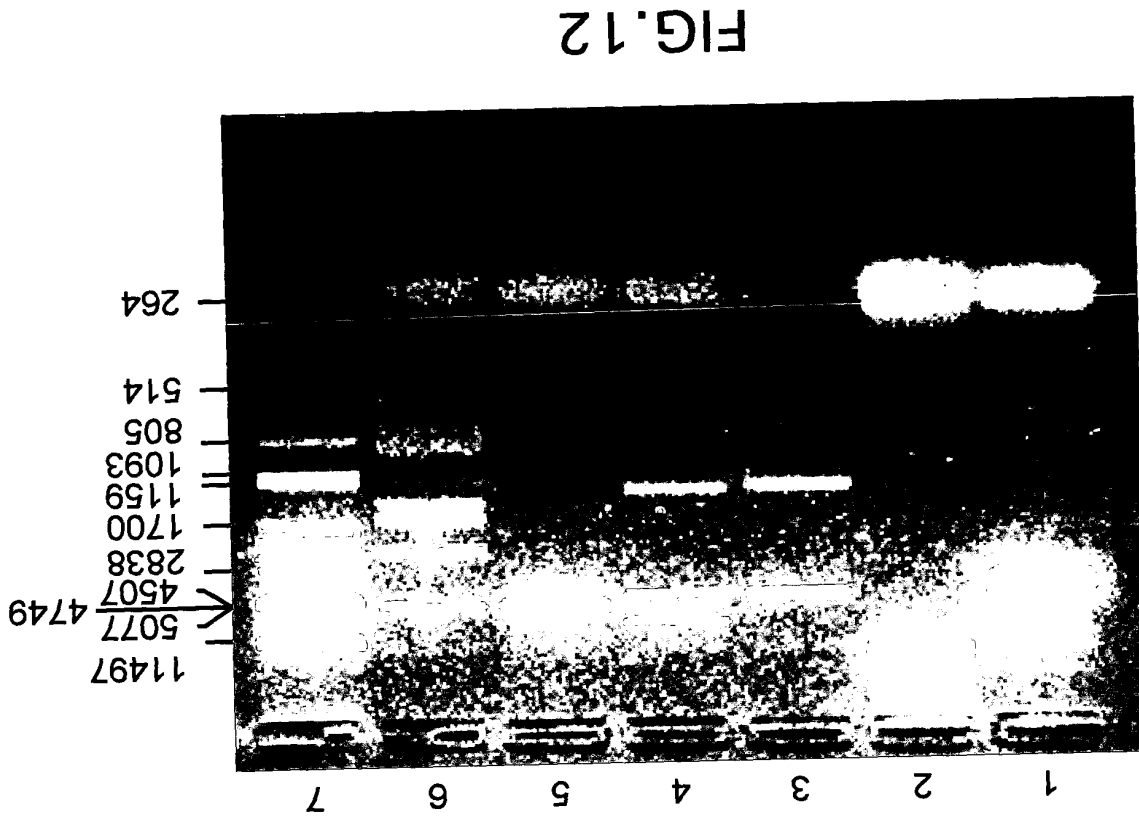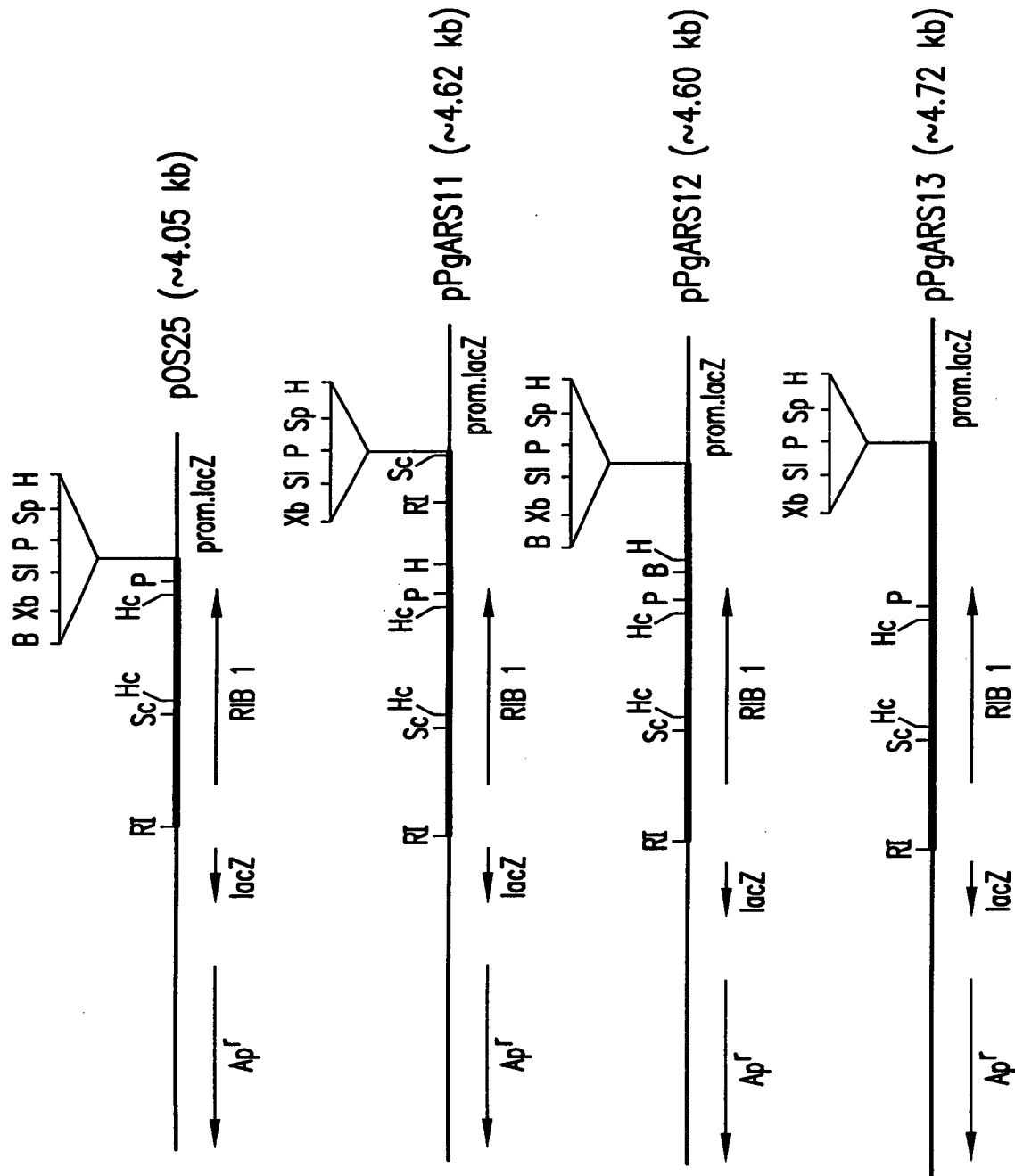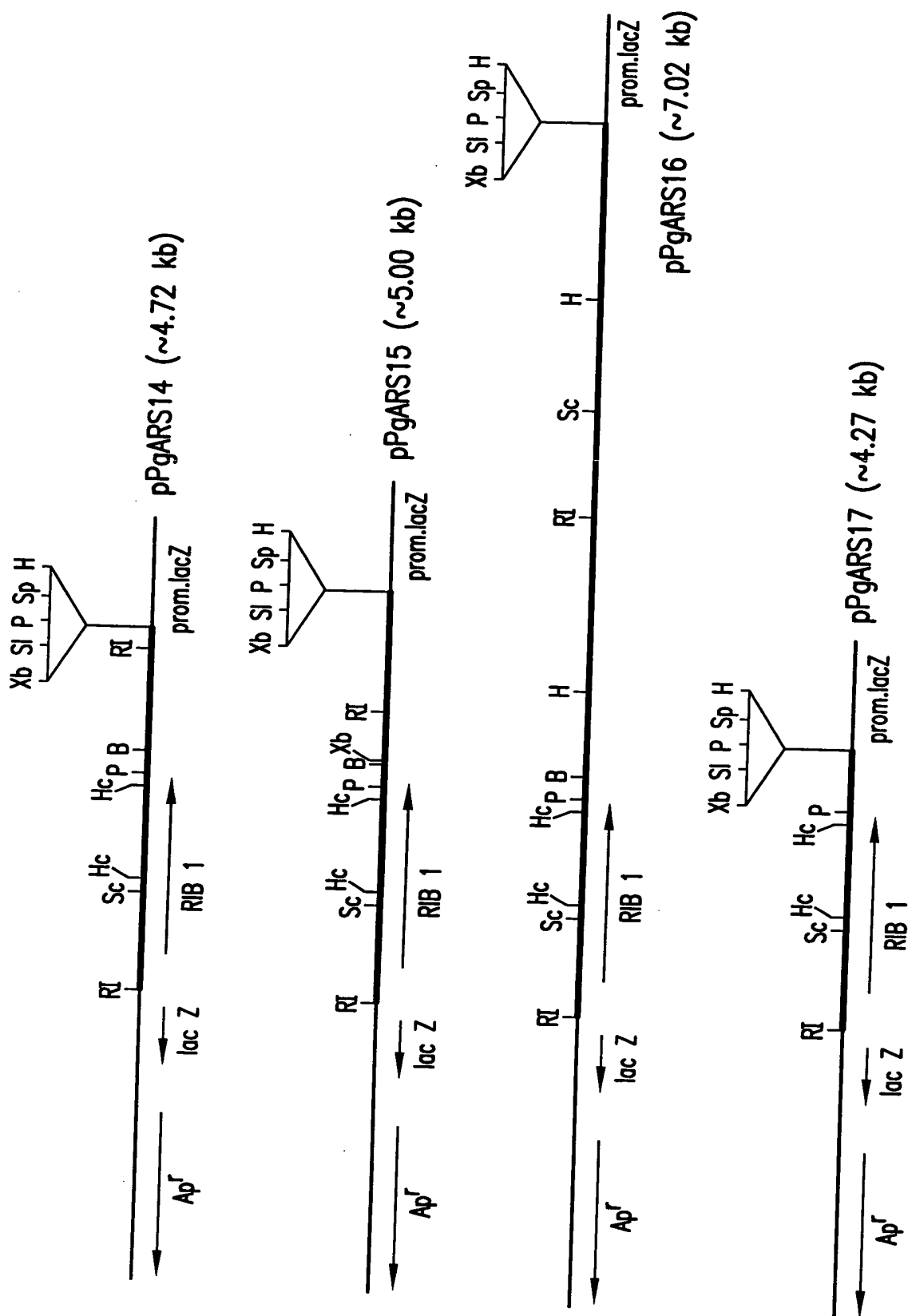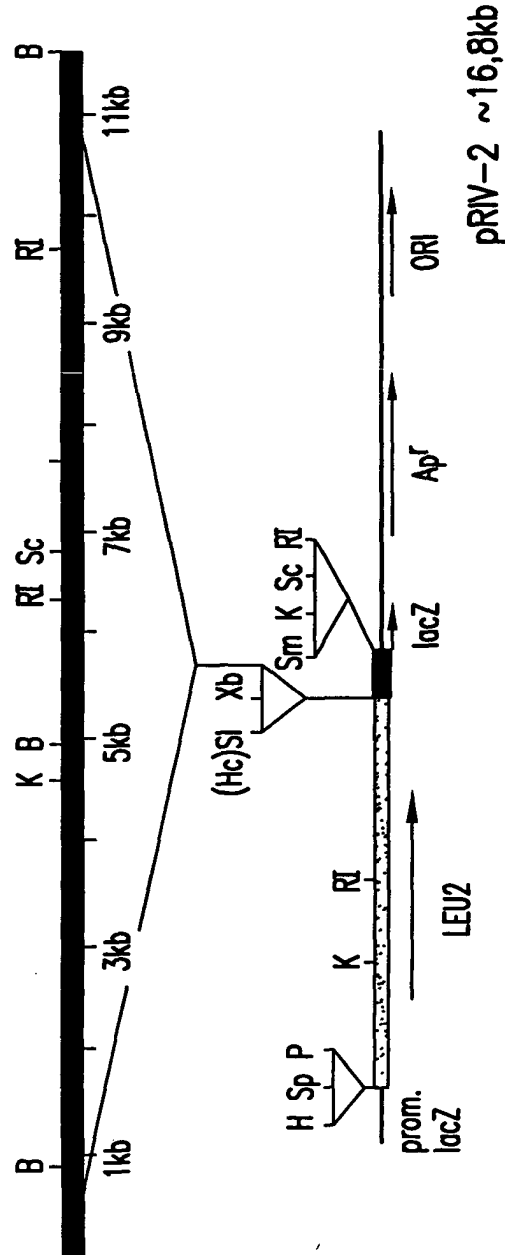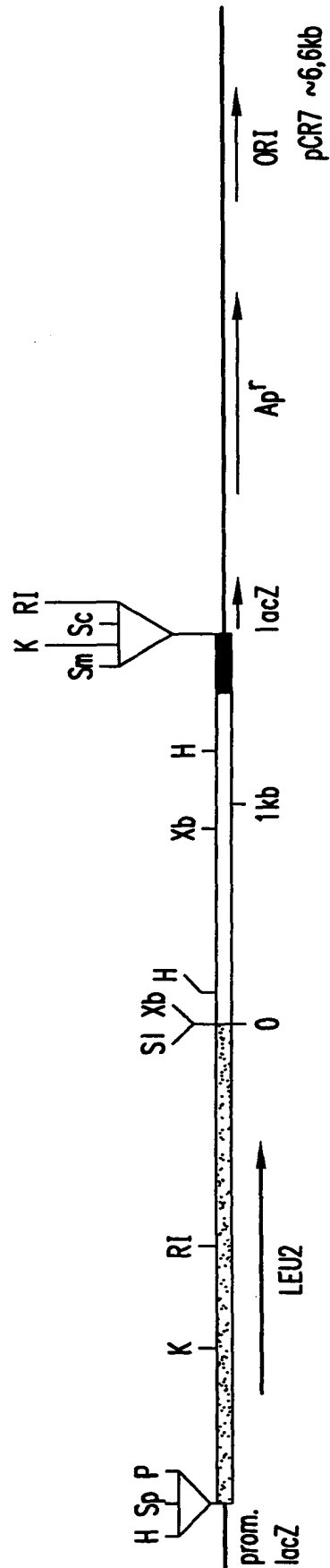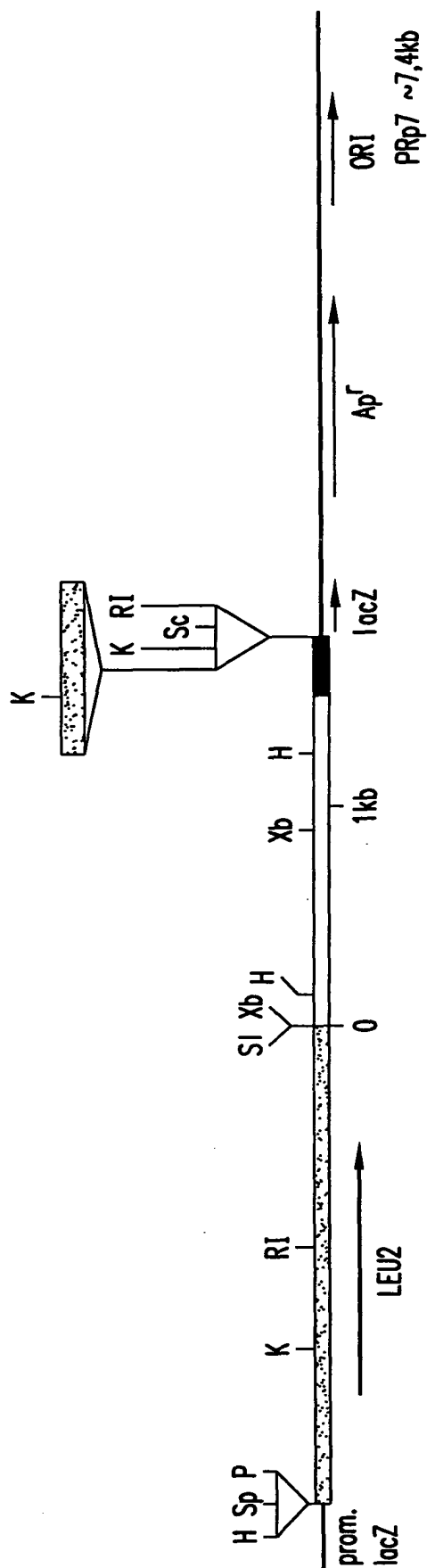
FIG. 10

FIG.11

FIG.12

FIG. 13

FIG. 14

<400> 1

```
cttgactgat tacgaattcg agctcggtac ccgggggatca tgaatgctag tctttttaca   60
ctgaatattt ttttaacgat tttttaataa ttttgcaatc atttaagaaa aaccacaaat  120
ggttttccaa aatttaaatt gatttttag aaagtcctaa aaaatagaat cataccaaat  180
aaagaacaac ttaaagtcac tatgacaaat tcagaaatac aatcgtatga tccgttcatg  240
gataaagctg caaagtcaca agcaaggcta actaagatcc tctagggga tcctctagag  300
tcgactacgt cgttaaggcc gtttctgaca gagtaaaatt cttgagggaa ctttcaccat  360
tatgggaaat ggttcaagaa ggtattgact aaactccat caaatggtca ggtcattgag  420
tgttttttat ttgttgtatt tttttttttt tagagaaaat cctccaatat ataaattagg  480
aatcatagtt tcatgatttt tagagaaaat cctccaatat ataaattagg aatcatagtt  540
tcatgatttt ctgttacacc taactttttg tgtggngccc tcctccttgt caatattaat  600
ctgttacacc taactttttg tgtggngccc tcctccttgt caatattaat gttaaagtgc  660
aattcttttt ccttatcacg ttgagccatt agtatcaatt gttaaagtgc aattcttttt  720
ccttatcacg ttgagccatt agtatcaatt tgcttacctg tattccttta catcctcctt  780
tttctccttc ttgataaatg tgcttacctg tattccttta catcctcctt tttctccttc  840
ttgataaatg tatgtagatt gcgtatatag tttcgtctac cctatgaaca tattccattt  900
tatgtagatt gcgtatatag tttcgtctac cctatgaaca tattccattt tgtaatttcg  960
tgtcgnttct attatgaatt tcatttataa aggttatgtn tgtaatttcg ggcgtttcta 1020
ttatgaattt catttataaa gtttatgtcc aatatcataa aaaaagagaa tcttttttaag 1080
caanggattt cttaactcaa atatcataaa aaaagagaat ctttttaagc aagggatttt 1140
cttaacttnt tcggggacgc atccccgctt cggnggactg gtggacccct aaatctnttc 1200
ggcgacagca tcccgacttc ggnggnactg tggaacccct aaatcccagt ntgatcctgc 1260
ttccaaanct tttactggtn ttcatgggcc taccccagtt ctgaacctgc atccaaanct 1320
tttactgctc ttcaagggct taccttntca ggcaggtcaa tgacaattca catcntgcnc 1380
anacnaaaaa nggctttttca gcaggtcaan gcaatttcac atcntgcnca aaaananagt 1440
ggcgatnggg tgacctntnt ttggcaacga tngggtgacc tatntttgca aac          1493
```

FIG.15

```
tatgcacatt cgcacgccga ggtgcagcgt ttaggcgcgg ctcaacggaa gccaacggcc 60
gccacaaatt gtccggaaag tcgccgaaac tgatccactg gtaccacagc cccataagaa 120
ccccctttaa tattaaaaac cgttcttcag ccacttttga tcacattgtt tgcagccgcc 180
cgttgctgcc atccaaacac cacgcgtccc ccgcacccct ttacggtgcc cactgcattg 240
gaatttgcat aaaacagcct cacgaagtgg attaattttt agagcactca agtcatcatg 300
ctgcaatctc tgcatcatga aatgactccc gttgatacag ggaactcaga ccgcaagcgg 360
cgaagagtca caagagcgtg tgatgtgtgt cgactctaga ggatccccgg gtac        414
```

FIG.16

FIG.17

FIG.18

FIG.19

```
tgattacgaa ttcgagctcg gtacccgggg atcatgaatg ctagtctttt tacactgaat 60
attttttaa cgatttttta ataattttgc aatcatttaa gaaaaaccac aaatggtttt 120
ccaaaattta aattgatttt ttagaaagtc ctaaaaaata gaatcatacc aaataaagaa 180
caacttaaag tcactatgac aaattcagaa atacaatcgt atgatccgtt catggataaa 240
gctgcaaagt cacaagcaag gctaactaag atcctctaga gtcgactacg tcgttaaggc 300
cgtttctgac agagtaaaat tcttgaggga actttcacca ttatgggaaa tggttcaaga 360
aggtattgac ttaaactcca tcaaatggtc aggtcattga gtgtttttta tttgntgtat 420
tttttttttt ttagagaaaa tcctccaata tataaattag gaatcatagt ttcatgattt 480
tctgtta                                                          487
```

FIG.20
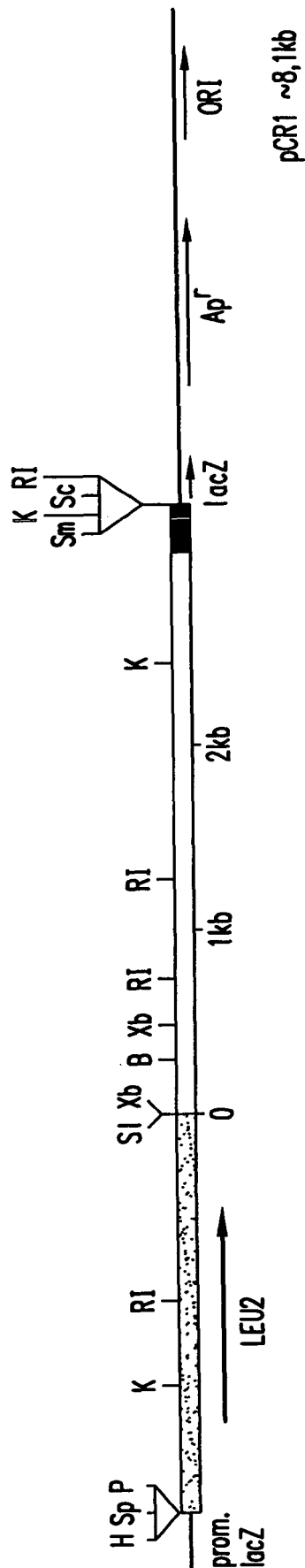
FIG.21
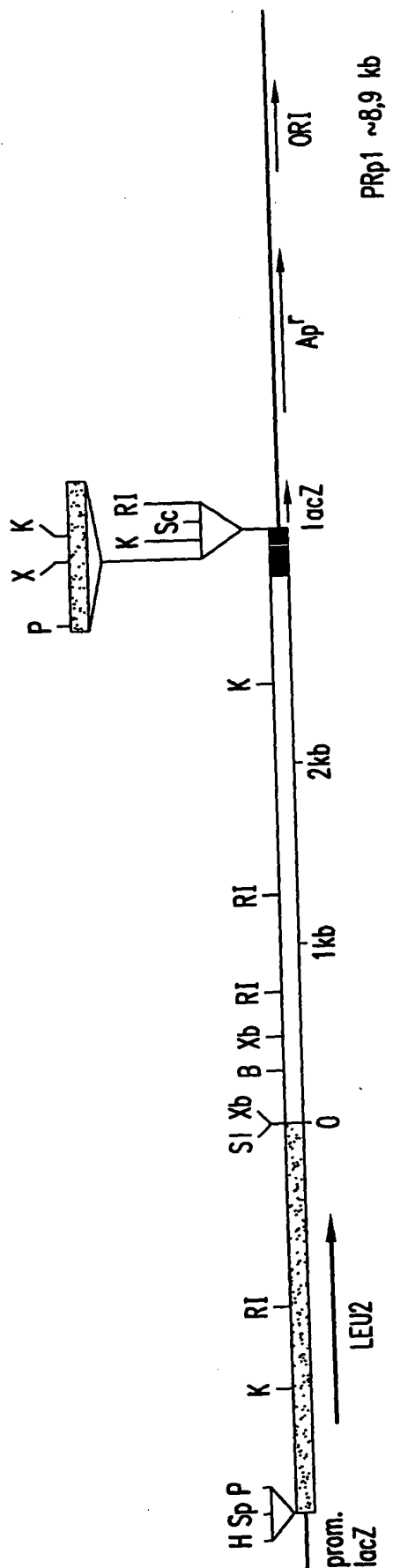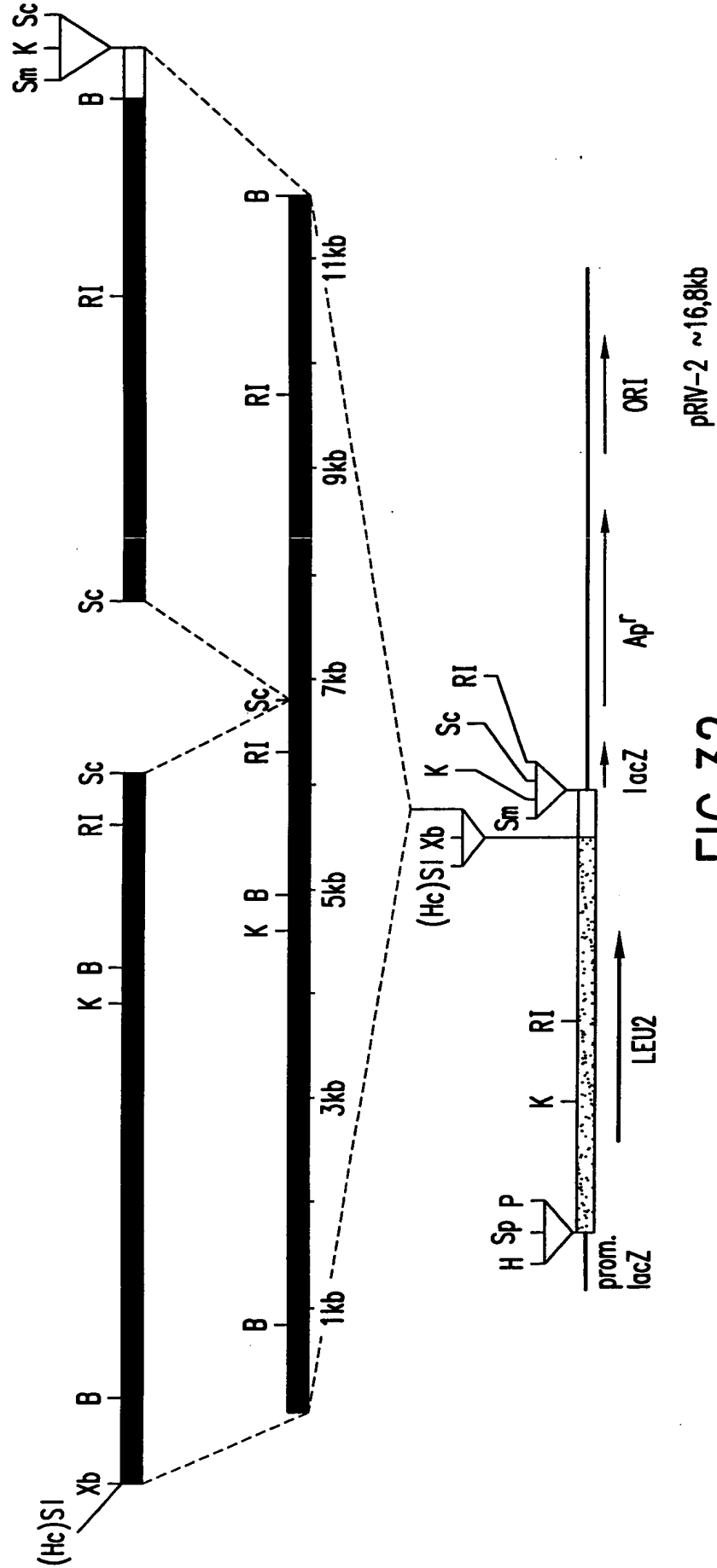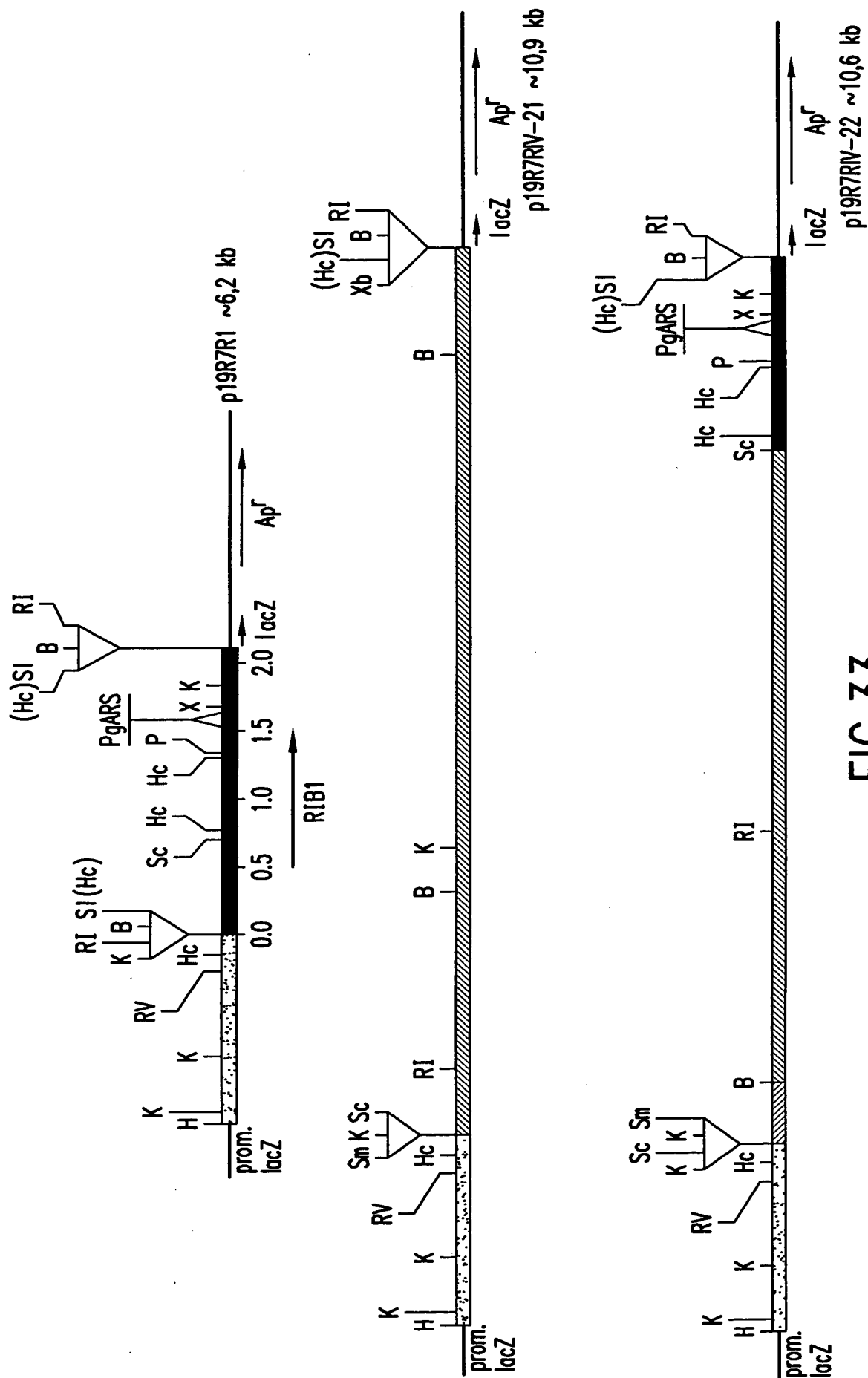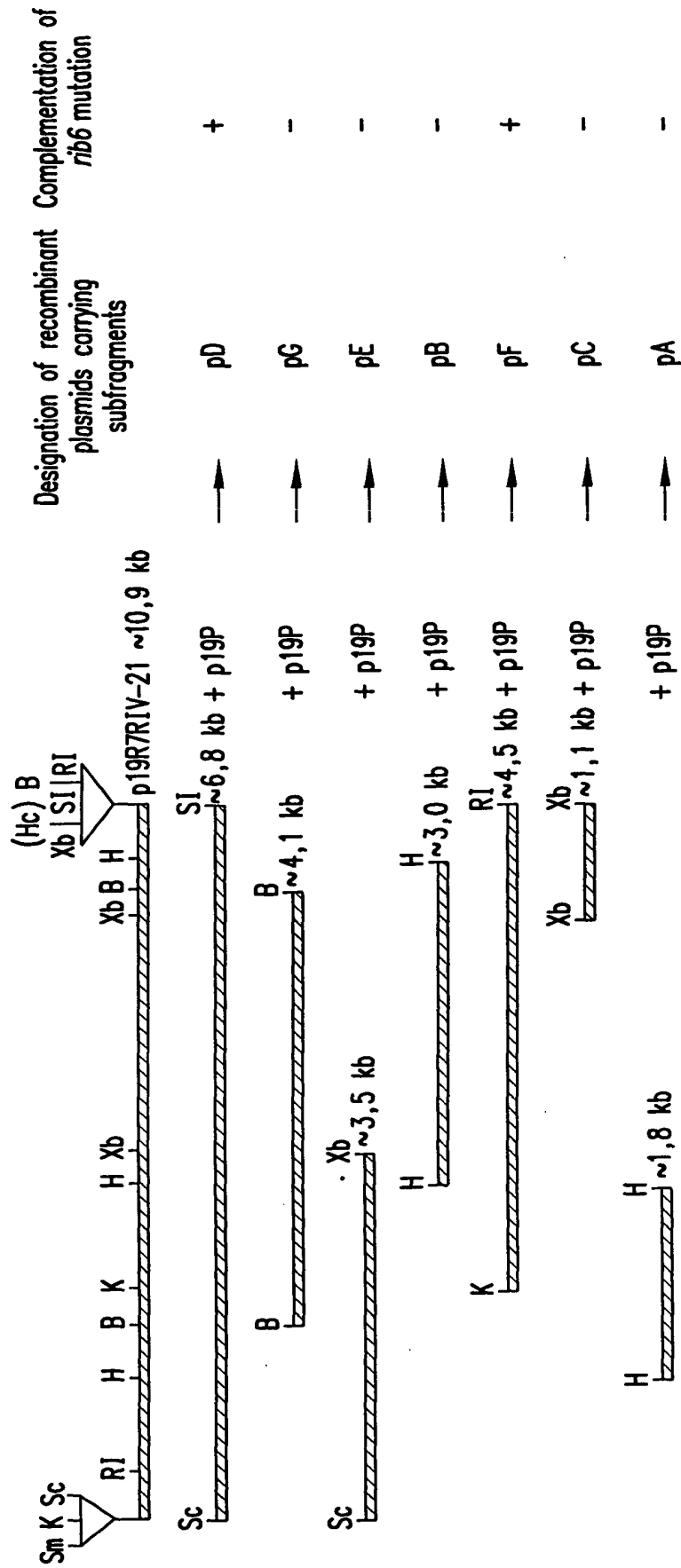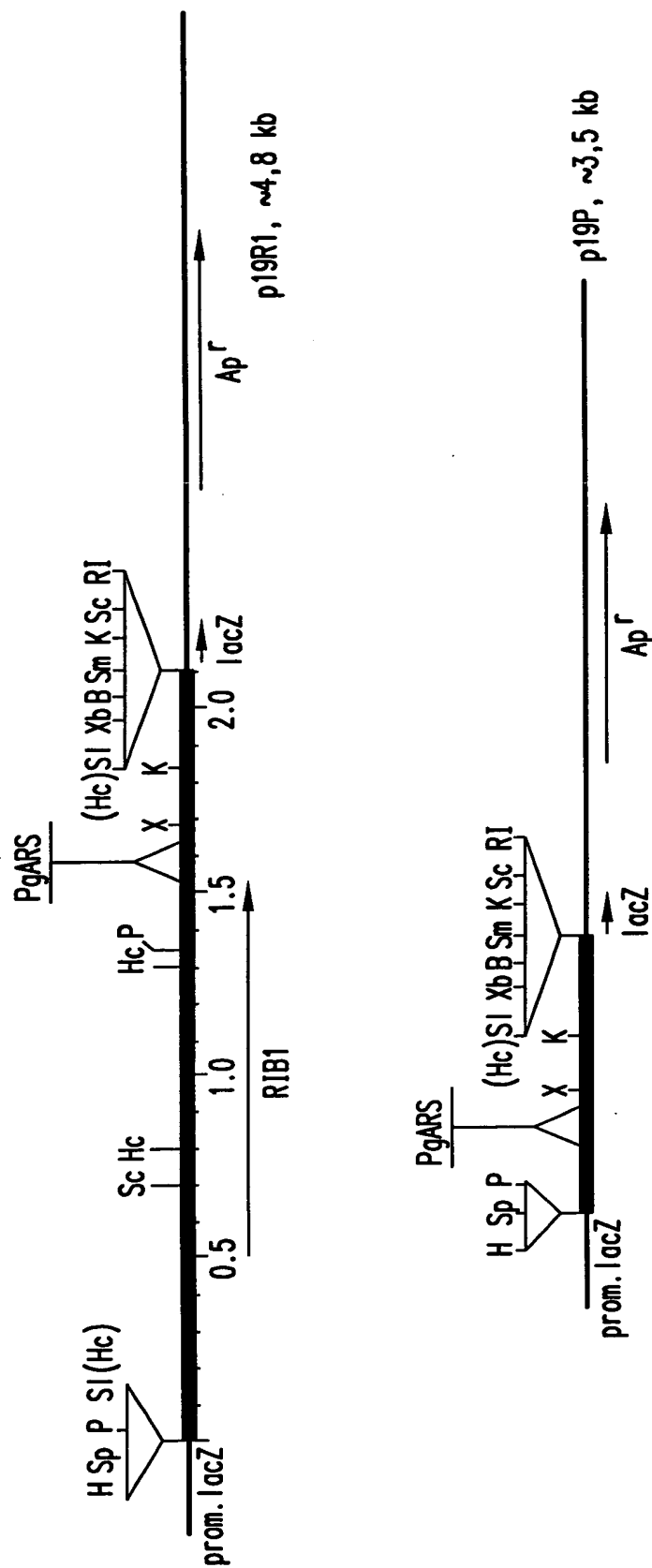
FIG.22
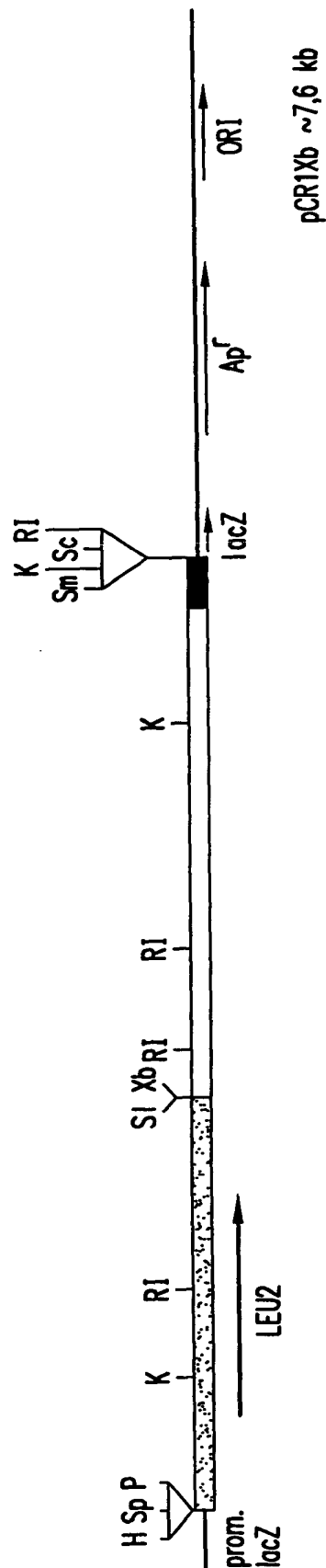
FIG.23
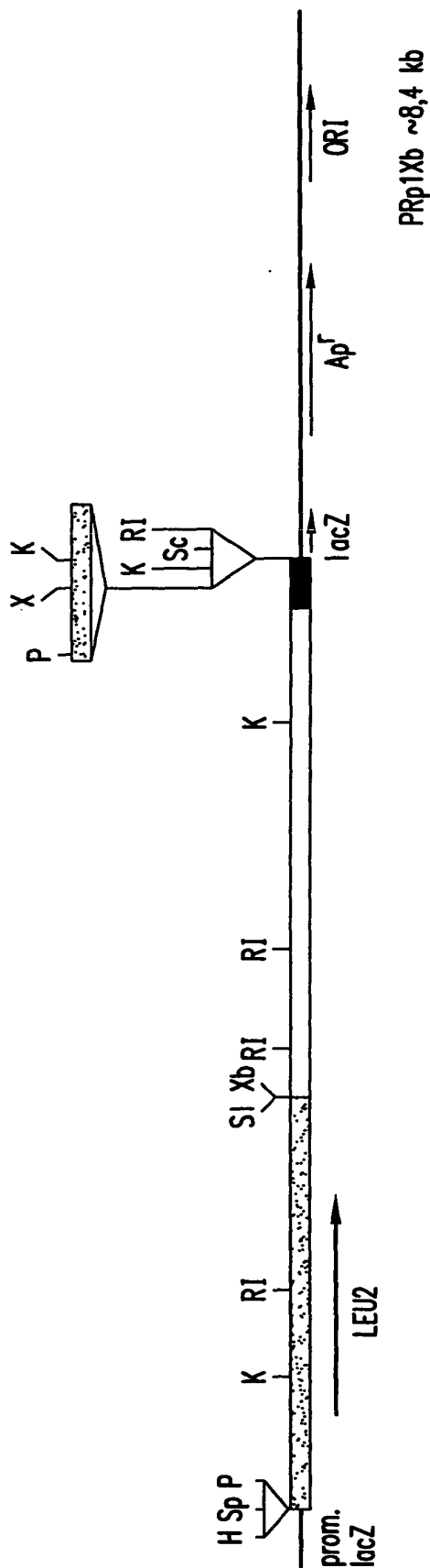
FIG.24
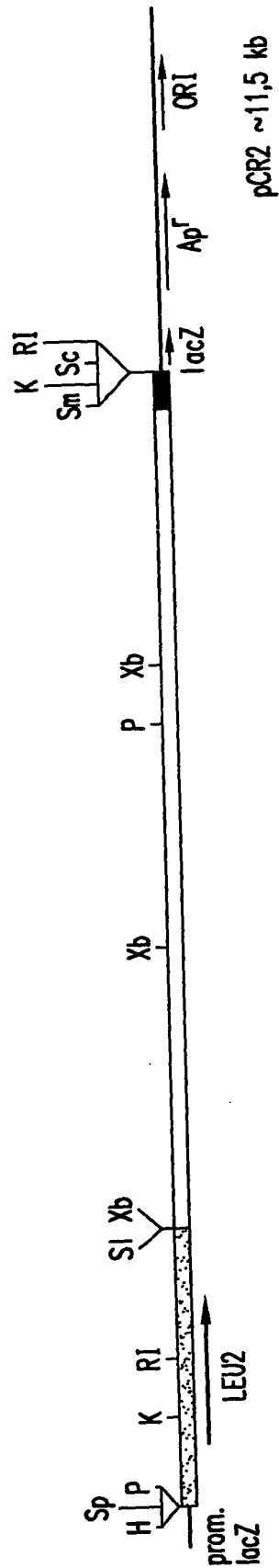
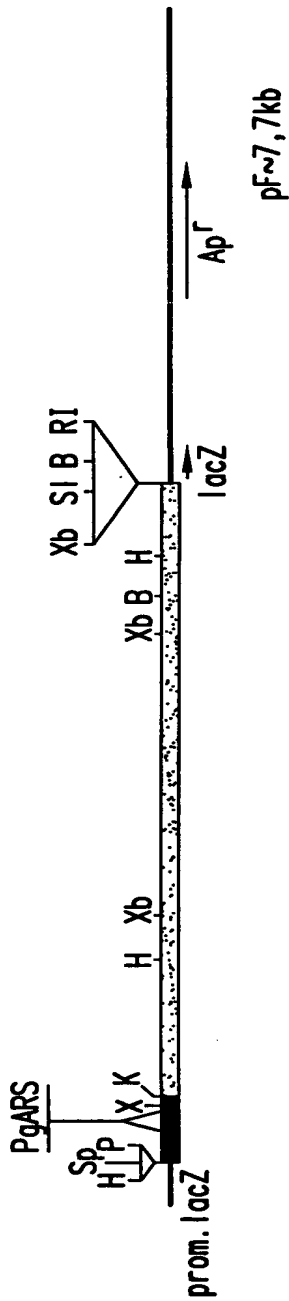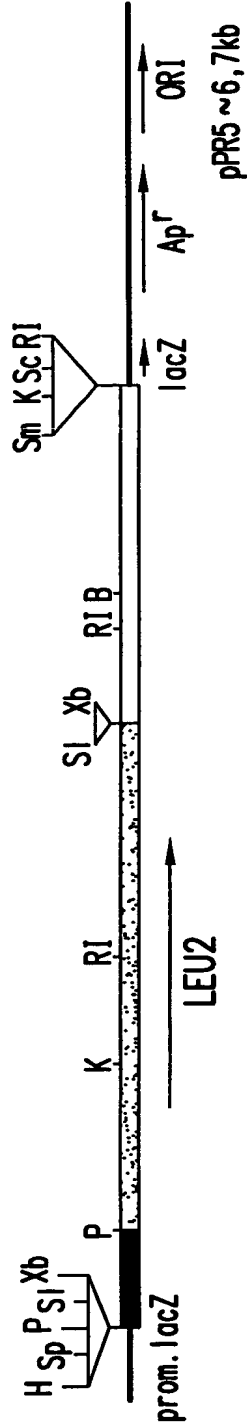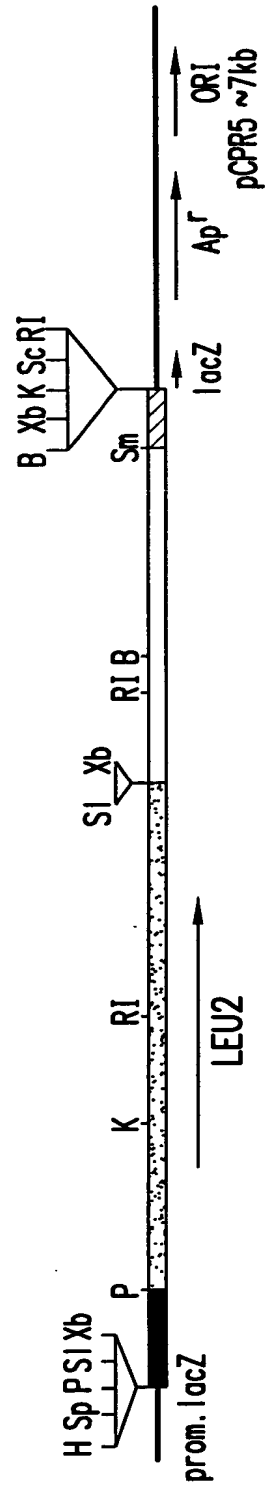FIG.25
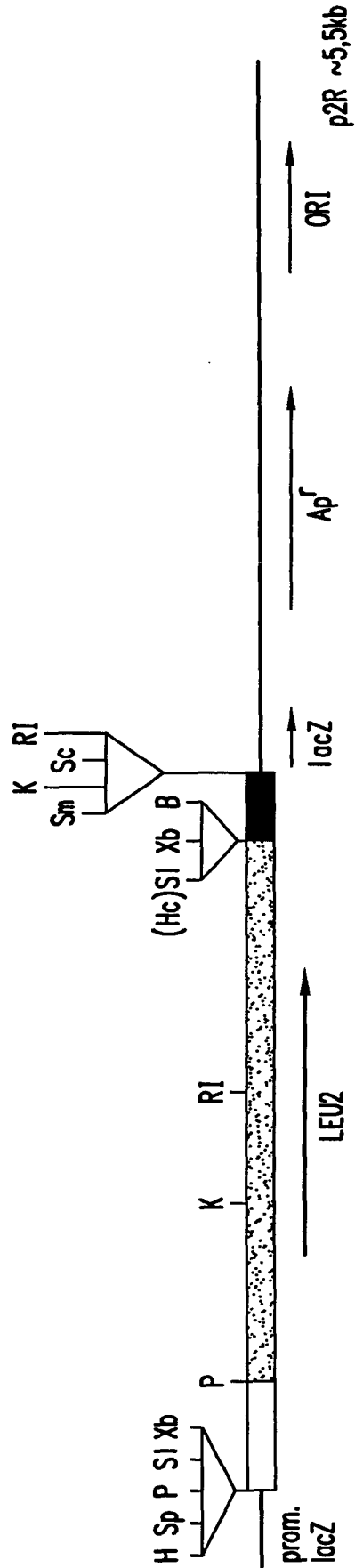
FIG.26
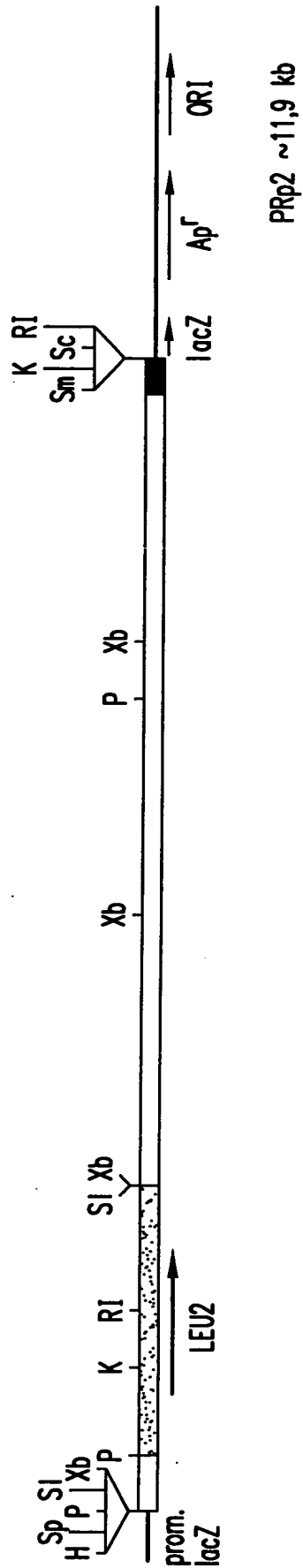
FIG.27
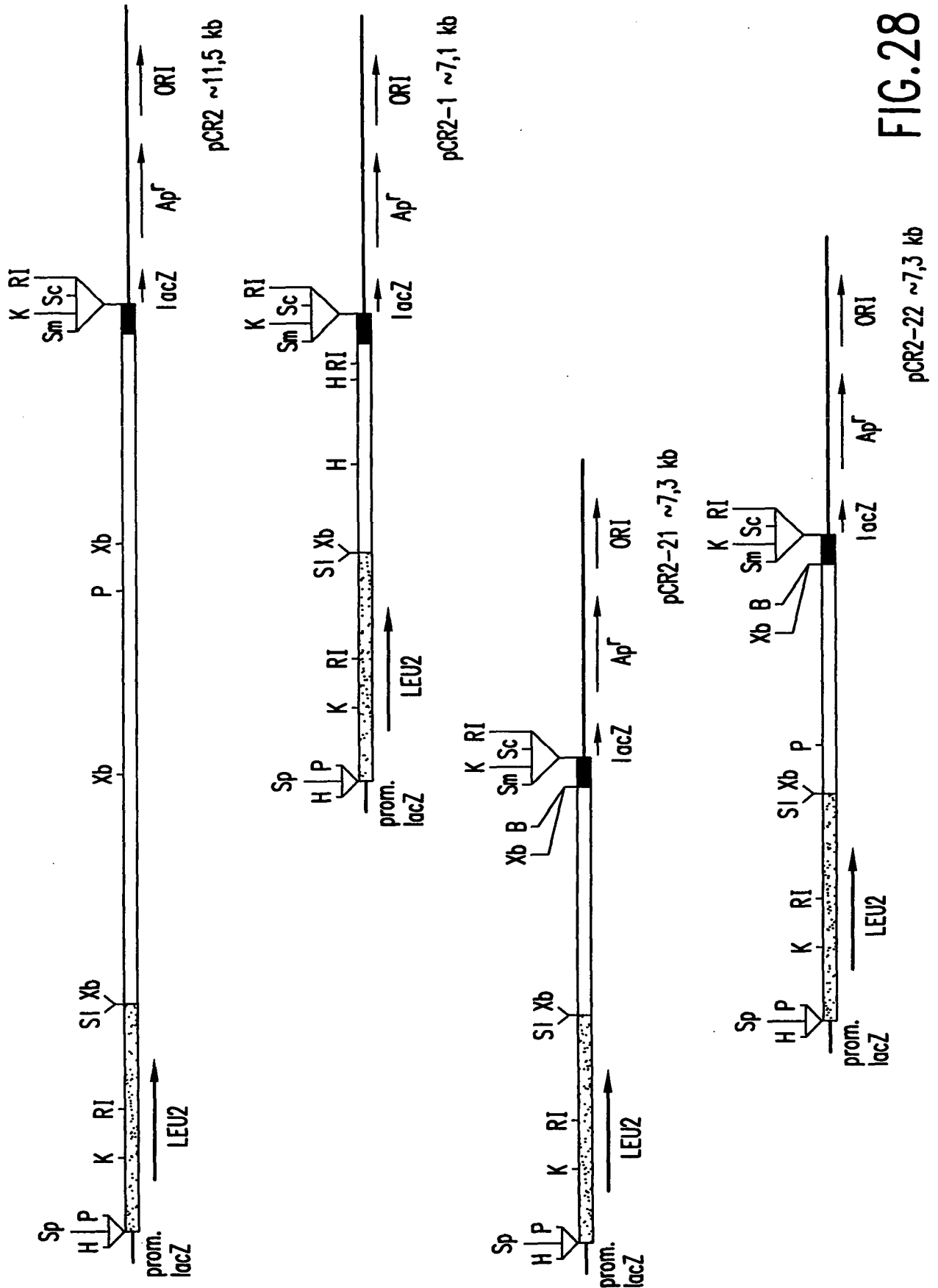
FIG.28

FIG.29

FIG.30

FIG.31
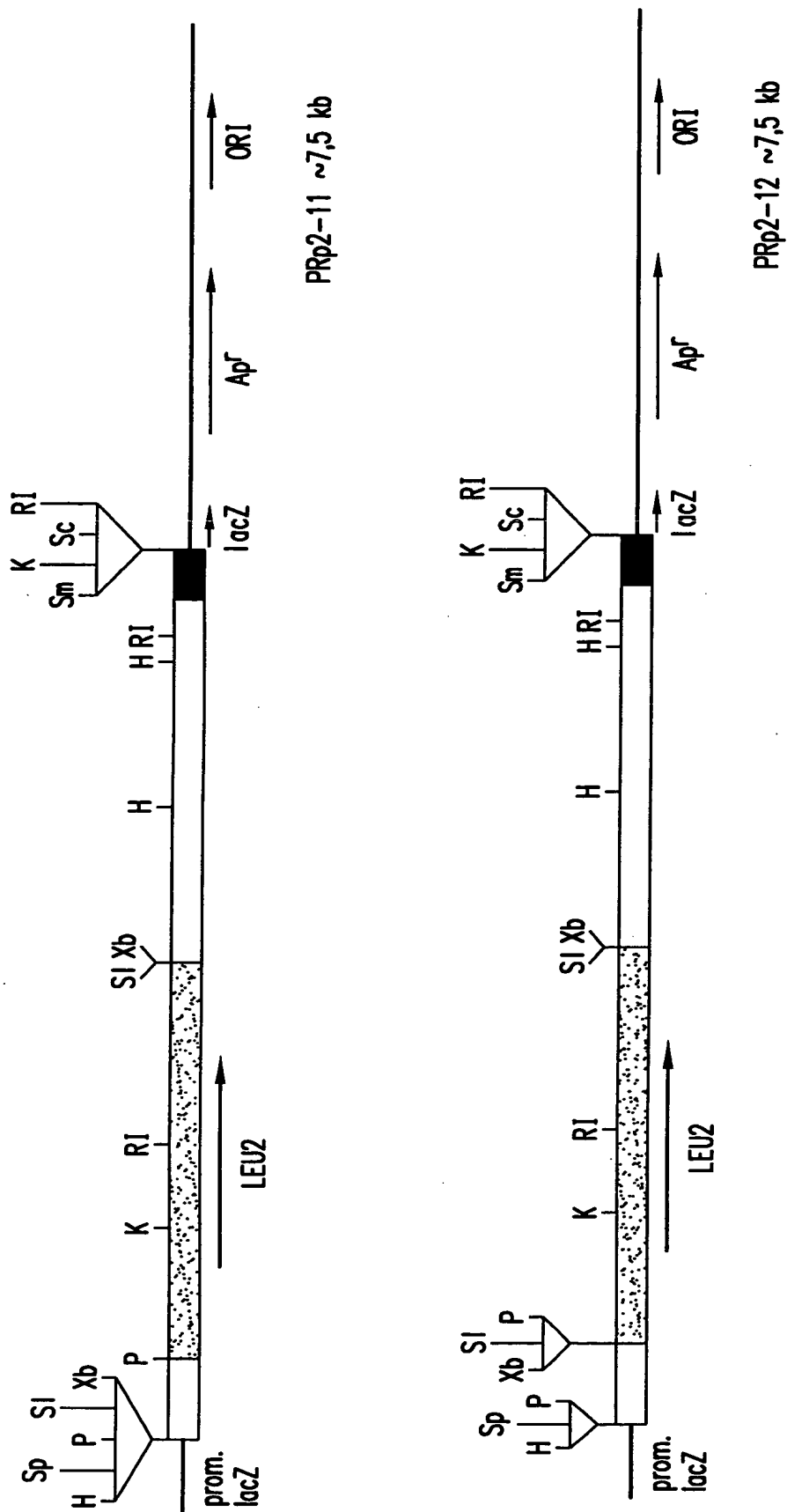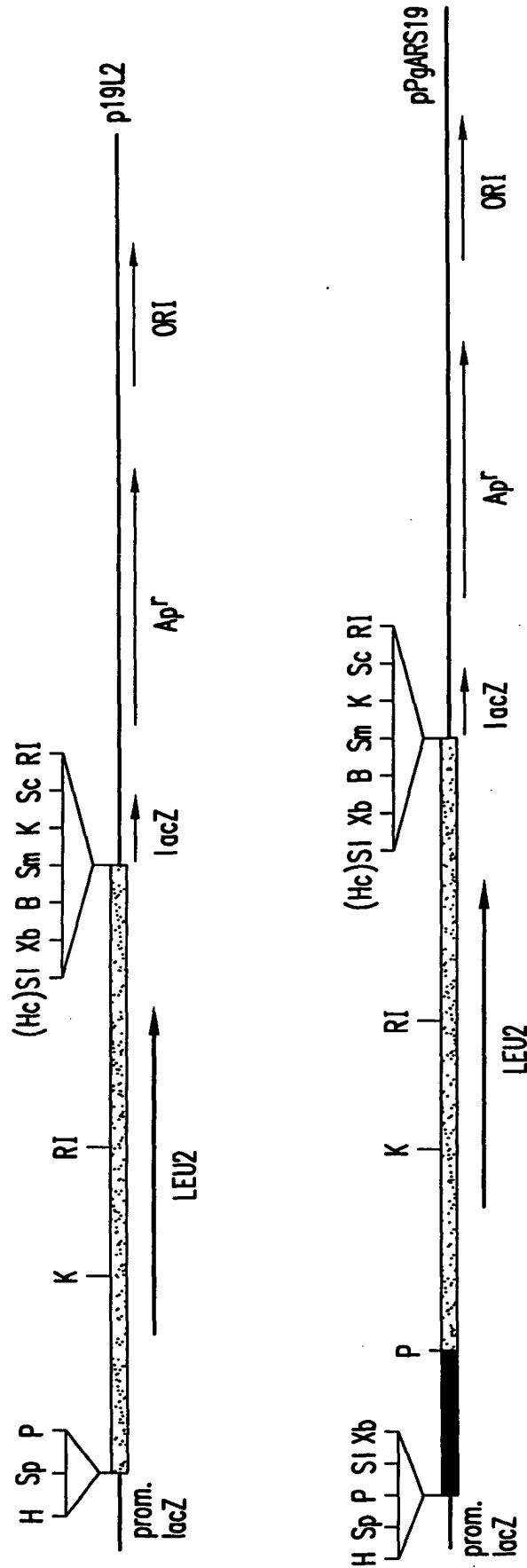
FIG.32

FIG.33

FIG.34

FIG.35

FIG.36

FIG.37

FIG.38

FIG.39

FIG.40

FIG.41

FIG.42

FIG.43

FIG.44

FIG.45